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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,787	09/28/2001	Patrick F. Dunne	2834/1	7062

7590 08/25/2003

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EXAMINER

HRUSKOCI, PETER A

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,787

Applicant(s)

DUNNE, PATRICK F.

Examiner

Peter A. Hruskoci

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 42-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7, 12-14, 16-19, 30-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al.. Heil et al. disclose (see col. 4 line 35 through col. 6 line 54) an apparatus for removal of solids from fluids substantially as claimed. The claims differ from Heil et al. by reciting that the equalization chamber has a solids discharge and the apparatus includes a second stage chemical injection. Othmer disclose (see col. 3 line 48 through col. 6 line 53) that it is known in the art to remove sludge from a pressurized sewage treatment tank with a solids discharge including a valve. Iida et al. disclose (see col. 2 line 53 through col. 4 line 27) that it is known in the art to utilize an injector to introduce flocculant into the transfer conduit of a pressurized decanter. It would have been obvious to one skilled in the art to modify the apparatus of Heil et al. by including the recited solids discharge and chemical injection in view of the teachings of Othmer and Iida et al. respectively, to aid in removing solids from the fluid. The use of first stage chemical injection, and type of injector and collection system utilized, would have been an obvious matter of choice in engineering design to one skilled in the art, depending on the specific fluid treated and results desired, absent a sufficient showing of unexpected results.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al. as above, and further in view of Saarenketo. The claims differ from the references as applied above by reciting that the first and second stage fluid transfer

Art Unit: 1724

conduits are wrapped around the equalization and clarification chambers, respectively.

Saarenketo disclose (see col. 2 line 49 through col. 4 line 8) that it is known in the art to spirally coil a transfer pipe around a sedimentation or clarification tank to aid in forming floccules in waste water. It would have been obvious to one skilled in the art to modify the references as applied above, by including the recited transfer conduits in view of the teachings of Saarenketo, to aid in forming floccules in the fluid.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al. as above, and further in view of Deskins. The claims differ from the references as applied above by reciting that the first and second stage fluid transfer conduits are fitted with internal flighting. Deskins disclose (see col. 15 line 10 through col. 16 line 37) that it is known in the art to include internal flighting or baffles (92) in an inline mixing conduit to aid in mixing flocculant with sewage. It would have been obvious to one skilled in the art to modify the references as applied above, by including the recited internal flighting in view of the teachings of Deskins, to aid in mixing flocculant with the fluid.

Claims 11, 20-25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al. as above, and further in view of Manz et al.. The claims differ from the references as applied above by reciting that the apparatus includes a decoupling tank, grinding pump, biological treatment filter, sand filter, ultraviolet disinfection unit, and settlement reservoir. Manz et al. disclose (see col. 8 line 51 through col. 14 line 9) that it is known in the art to utilize the recited tank, pump, filters, disinfection unit, and reservoir, to aid in solids removal from effluents, and in sterilization of liquid effluents, respectively. It would have been obvious to one skilled in the art to modify the references as applied above, by

Art Unit: 1724

including the recited tank, pump, filters, disinfection unit, and reservoir, in view of the teaching of Manz et al., to aid in removing solids from the fluid, and in sterilization of liquid effluents, respectively. The use of a plurality of grinding pumps, would have been an obvious matter of choice in engineering design to one skilled in the art, depending on the specific fluid treated and results desired, absent a sufficient showing of unexpected results.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer, Iida et al., and Manz et al. as above, and further in view of De Longe. The claim differs from the references as applied above by reciting that the downstream fluids processing apparatus is a chlorinator. De Longe disclose (see col. 4 line 23 through col. 6 line 60) that it is known in the art to utilize a chlorinator to treat the liquid effluent discharged from a settling tank. It would have been obvious to one skilled in the art to modify the references as applied above, by including the recited chlorinator in view of the teachings of De Longe, to aid in further treating the separated fluid discharge.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al. as above, and further in view of Burke. The claim differs from the references as applied above by reciting that the downstream solids sterilization apparatus is a pasteurizer. Burke disclose (see col. 4 line 35 through col. 16 line 37) that it is known in the art to utilize a pasteurization system to destroy bacteria in waste solids from a digester. It would have been obvious to one skilled in the art to modify the references as applied above, by including the pasteurizer in view of the teachings of Burke, to aid in destroying bacteria or sterilizing the solids discharge.

Art Unit: 1724

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heil et al. in view of Othmer and Iida et al. as above, and further in view of Nassef et al.. The claims differ from the references as applied above by reciting that the downstream solids sterilization apparatus is a microwave treatment unit. Nassef et al. disclose (see col. 6 lines 10-59) that it is known in the art to utilize a microwave generator to sterilize a separated solid organic waste. It would have been obvious to one skilled in the art to modify the references as applied above, by including the reciting microwave treatment unit in view of the teachings of Nassef et al., to aid in sterilizing the solids discharge.

Applicant's election with traverse of Group I, claims 1-41 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that PCT Rule 13.2 does not require that each shared technical feature define a contribution over the prior art, only that one or more shared technical feature does so. This is not found persuasive because restriction is considered proper under 35 USC 121 and 372 in a 371 application when one shared special technical feature such as the instant clarification chamber does not define a contribution over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is 703-308-3839. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/937,787

Page 6

Art Unit: 1724

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Peter A. Hruskoci
Primary Examiner
Art Unit 1724

8/20/03